

# Notice of Allowability

Application No.

09/945,309

Examiner

James C Kerveros

Applicant(s)

KIRK, STEVE VAN

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed March 22, 2003.
2. ☒ The allowed claim(s) is/are 1,3-7,9-12 and 14-49.
3. ☒ The drawings filed on 30 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Albert Decady*  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Art Unit: 2133

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to Amendment filed March 22, 2003.

Claims 1, 3-7, 9-12 and 14-49 are allowed.

Claims 2, 8 and 13 are cancelled according to Amendment filed March 22, 2003.

### ***Election/Restrictions***

2. Claims 1, 3-7, 9-12 and 14-49 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 31-49, directed to the process of making or using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Claims 31-49 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Since all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement made in Paper No. 6 is hereby withdrawn.

## **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Art Unit: 2133

Authorization for this examiner's amendment was given in a telephone interview with Mark Muller on April 26, 2004.

The application has been amended as follows:

Claim 6, at the end of the last paragraph of the claim, the period "." was deleted and the following sentence was added "; wherein the test domain is a first ground connection of the integrated circuit, and wherein the reference domain is a second ground connection of the integrated circuit."

Claim 31, at the end of the last paragraph of the claim, the period "." was deleted and the following sentence was added "; wherein the test domain is a first ground connection of the integrated circuit, and wherein the reference domain is a second ground connection of the integrated circuit."

Claim 36, at the end of the last paragraph of the claim, the period "." was deleted and the following sentence was added "; wherein the test domain is a first ground connection of the integrated circuit, and wherein the reference domain is a second ground connection of the integrated circuit."

Claim 41, on line 16, after ";" and before 'and' the following sentence was inserted "wherein the test domain is a first ground connection of the integrated circuit, and wherein the reference domain is a second ground connection of the integrated circuit,".

### REASONS FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance:

The prior arts of record taken alone or in combination fail to teach, anticipate, suggest or render obvious the claimed invention, recited in the independent claims 1, 6, 7, 12, 31, 36 and 41, including a measurement circuit supported by a substrate, ***wherein the measurement circuit is operatively connected to a reference domain and a test domain to measure a difference between a test voltage and a reference voltage, wherein the test domain is a first ground connection of an integrated circuit, and wherein the reference domain is a second ground connection of the integrated circuit.***"

Further, the claimed invention includes a circuit module having a first memory integrated circuit package....and a second memory integrated circuit package including ***an integrated memory circuit having a test domain...and a reference domain, wherein a measurement circuit is operatively connected to the reference domain and the test domain to measure the difference between the test voltage and the reference voltage,*** recited in the independent Claims 16, 20, 43 and 44.

Furthermore, claimed invention includes a ground bounce measurement system, having a measurement circuit having a data acquisition system, ***wherein the measurement circuit is connected to a reference domain and a test domain to measure the difference between a test voltage and a reference voltage, and wherein the difference is acquired and stored by the data acquisition system,*** recited in the independent Claims 21, 26, 45 and 48.

Art Unit: 2133

5. Consequently, all independent claims cited above, 1, 6, 7, 12, 16, 20, 21, 26, 31, 36, 41, 43, 44, 45 and 48 are allowed over the prior arts of record.

Claims 1, 3-5, 9-11, 14, 15, 17-19, 22-25, 27-30, 32-35, 37-40, 42, 46, 47 and 49 are directly or indirectly depended upon the independent claims and therefore are also allowable.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

---

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James C Kerveros whose telephone number is (703) 305-1081. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

U.S. PATENT OFFICE  
Examiner's Fax: (703) 746-4461  
Email: [james.kerveros@uspto.gov](mailto:james.kerveros@uspto.gov)

Date: 26 April 2004  
Office Action: Allowance

By: \_\_\_\_\_

James O. Kerveros  
Examiner  
Art Unit 2133

  
ROBERT D. GANDY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100